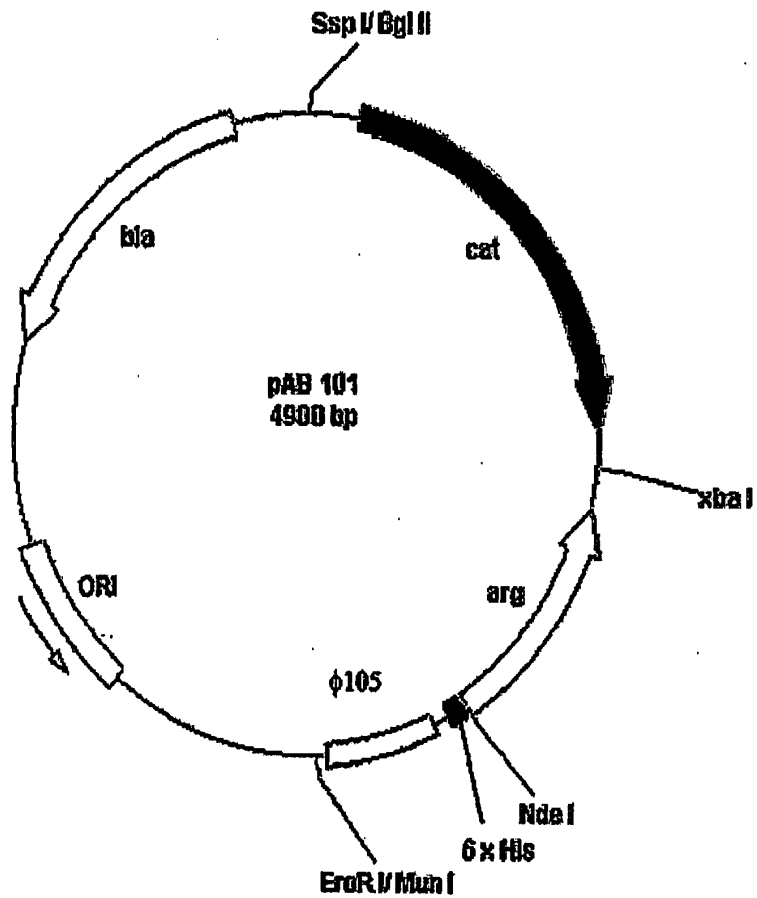


Fig. 1



10/518223

2/46

Fig. 2A

1 gaattgtacg tcaaagagat gaagcagaaa aacgtcgtcg agaagaagct gaacgacaaa
61 aagtgaatg cgaggggaagt ccaagaaatg gtgattatga ggggtgtctat ttcaccaaaa
121 acggagaata tttattggaa ttaagagtct ctgggactgc tcttgtaaata gtcctttgta
181 atttaaagga tattgacata acgaaatggt tgtgtaaaac agggagatta tatcttgata
241 aggttaagaa atttgaaata gttactattc tttcccatga cgtagaaaat caaaaagatta
301 taacagaatg ggagtcactc ccagagagg ctttaccgga acaatttgat tcataagaac
361 taattagtag cgctttccaa tggaggcgct tttttatttg ggtagttgca taccactaaa
421 gatgttcagg tgcacatgag cattggagga aaggaacgct ttagggggaa gggaaacctt
481 taaacagtct taatccccct tgattttatg ttctctgtaa actgcgtccg gtaaatctca
541 ggatagacaa tcggcgggta acggcttgag tgcgggggca gtttagaaag aatatgattg
601 gagggattca tagatgcac accatcacca tcatatgagc gccagtcca gaaccatagg
661 gattattgga gtccttttct caaagggaca gccacgagga ggggtggaag aaggccctac
721 agtattgaga aaggctgggtc tgcttgagaa acttaaagaa caagagtgtg atgtgaagga
781 ttatggggac ctgccctttg ctgacatccc taatgacagt ccctttcaaa ttgtgaagaa
841 tccaaggtct gtgggaaaag caagcgagca gctggctggc aaggtggcac aagtcaagaa
901 gaacggaaga atcagcctgg tgctggcgag agaccacagt ttggcaattg gaagcatctc
961 tggccatgcc aggggtccacc ctgatcttgg agtcatctgg gtggatgctc acactgatat
1021 caacactcca ctgacaacca caagtggaaa cttgcatgga caacctgtat ctttctcct
1081 gaaggaacta aaaggaaaga ttcccgatgt gccaggattc tcctgggtga ctccctgtat
1141 atctgccaag gatatttgtt atattggctt gagagacgtg gacctgggg aacactacat
1201 tttgaaaact ctaggcatta aatacttttc aatgactgaa gtggacagac taggaattgg
1261 caaggtgatg gaagaaacac tcagctatct actaggaaga aagaaaaggc caattcatct
1321 aagttttgat gttgacggac tggacccatc tttcacacca gctactggca caccagtcgt
1381 gggaggtctg acatacagag aaggtctcta catcacagaa gaaatctaca aaacagggct
1441 actctcagga ttgatataa tggaaagtga cccatccctg gggaagacac cagaagaagt
1501 aactcgaaca gtgaacacag cagttgcaat aaccttggct tgtttcggac ttgctcggga
1561 ggtaatcac aagcctattg actaccttaa cccacctaag taaagtgtga aacatccgat
1621 ataaatctca tagttaatgg cataattaga aagctaata ttttcttaag catagagtta
1681 tccttctaaa gacttgttct ttcagaaaaa tgtttttcca attagtataa actctacaaa
1741 ttccctcttg gtgtaaaatt caagatgtgg aaattctaac ttttttgaaa tttaaaagct
1801 tatattttct aacttggcaa aagacttatc cttagaaaga gaagtgtaca ttgatttcca
1861 attaaaaatt tgctggcatt aaaaataagc acacttacat aagccccat acatagagtg
1921 ggactcttgg aatcaggaga caaagctacc acatgtggaa aggtactatg tgtccatgct
1981 attcaaaaaa tgtgatttcta ga

10/518223

3/46

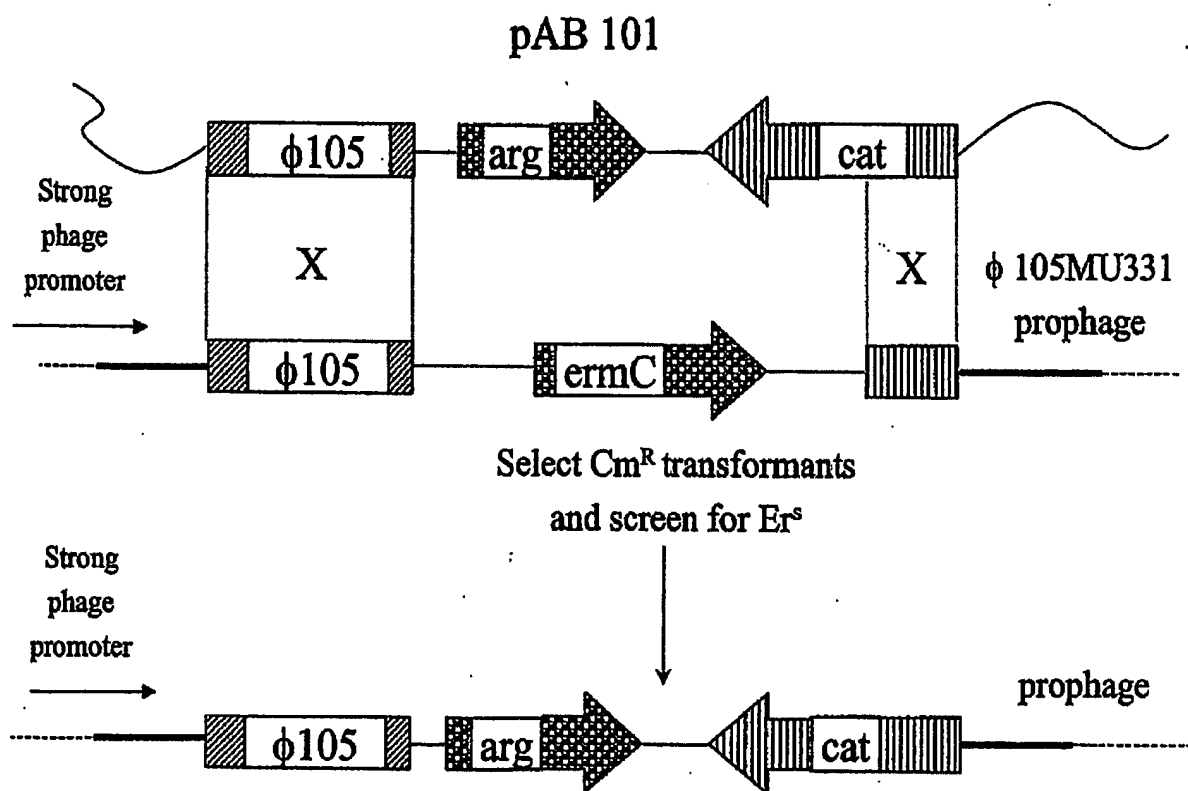
Fig. 2B

1 atgcatcaccatcaccatcat
M H H H H H H
22 atgagcgccaagtccagaacctagggattattggagctcctttc
M S A K S R T I G I I G A P F
67 tcaaaggacagccacgaggaggggtggaagaagggcctacagta
S K G Q P R G G V E E G P T V
112 ttgagaaaggctggtctgcttgagaaacttaagaacaagagtgt
L R K A G L L E K L K E Q E C
157 gatgtgaaggattatggggacctgccctttgctgacatcccta
D V K D Y G D L P F A D I P N
202 gacagtccctttcaaattgtgaagaatccaaggctctgtgggaaa
D S P F Q I V K N P R S V G K
247 gcaagcgagcagctggctggcaaggtggcacaagtcaagaagaac
A S E Q L A G K V A Q V K K N
292 ggaagaatcagcctggtgctggcgagaccacagtttggcaatt
G R I S L V L G G D H S L A I
337 ggaagcatctctggccatgccagggtccaccctgatcttgagtc
G S I S G H A R V H P D L G V
382 atctgggtggatgctcacactgatatacaactccactgacaacc
I W V D A H T D I N T P L T T
427 acaagtggaaacttgcatggacaacctgtatctttcctcctgaag
T S G N L H G Q P V S F L L K
472 gaactaaaaggaaagattcccgatgtgccaggattctcctgggtg
E L K G K I P D V P G F S W V
517 actccctgtatatctgccaaggatattgtgtatattggcttgaga
T P C I S A K D I V Y I G L R
562 gacgtggaccctggggaactacattttgaaaactctaggcatt
D V D P G E H Y I L K T L G I
607 aaatacttttcaatgactgaagtggacagactaggaattggcaag
K Y F S M T E V D R L G I G K
652 gtgatggaagaaactcagctatctactaggaagaagaaaagg
V M E E T L S Y L L G R K K R
697 ccaattcatctaagttttgatgttgacggactggaccatctttc
P I H L S F D V D G L D P S F
742 acaccagctactggcacaccagtcgtgggaggtctgacatacaga
T P A T G T P V V G G L T Y R
787 gaaggtctctacatcacagaagaaatctacaaaacagggtactc
E G L Y I T E E I Y K T G L L
832 tcaggattagatataatggaagtgaacccatccctggggaagaca
S G L D I M E V N P S L G K T
877 ccagaagaagtaactcgaacagtgaacacagcagttgcaataacc
P E E V T R T V N T A V A I T
922 ttgcttgttttcggacttgctcgggagggtaatcacaagcctatt
L A C F G L A R E G N H K P I
967 gactaccttaacccacctaagtaa 990
D Y L N P P K *

Fig. 2C

1 atgagcgccaagtccagaacccatagggattattggagctcctttc
M S A K S R T I G I I G A P F
46 tcaaagggacagccacgaggaggggtggaagaaggccctacagta
S K G Q P R G G V E E G P T V
91 ttgagaaaggctggtctgcttgagaaacttaaagaacaagagtgt
L R K A G L L E K L K E Q E C
136 gatgtgaaggattatggggacctgccctttgctgacatcccta
D V K D Y G D L P F A D I P N
181 gacagtccctttcaaattgtgaagaatccaaggctctgtgggaaaa
D S P F Q I V K N P R S V G K
226 gcaagcgagcagctggctggcaagggtgcacaagtcaagaagaac
A S E Q L A G K V A Q V K K N
271 ggaagaatcagcctggtgctggcgagaccacagtttggaatt
G R I S L V L G G D H S L A I
316 ggaagcatctctggccatgccagggtccaccctgatcttgagtc
G S I S G H A R V H P D L G V
361 atctgggtggatgctcactgatatacaactccactgacaacc
I W V D A H T D I N T P L T T
406 acaagtggaaacttgcatggacaacctgtatcttctcctcctgaag
T S G N L H G Q P V S F L L K
451 gaactaaaaggaaagattcccgatgtgccaggattctcctgggtg
E L K G K I P D V P G F S W V
496 actccctgtatatctgccaaggatattgtgtatatattggcttgaga
T P C I S A K D I V Y I G L R
541 gacgtggaccctggggaacactacattttgaaaactctaggcatt
D V D P G E H Y I L K T L G I
586 aaatacttttcaatgactgaagtggacagactaggaattggcaag
K Y F S M T E V D R L G I G K
631 gtgatgggaagaaacactcagctatctactaggaagaaagaaaagg
V M E E T L S Y L L G R K K R
676 ccaattcatctaagttttgatgttgacggactggaccatctttc
P I H L S F D V D G L D P S F
721 acaccagctactggcacaccagtcgtgggaggtctgacatacaga
T P A T G T P V V G G L T Y R
766 gaaggctctacatcacagaagaatctacaaaacagggctactc
E G L Y I T E E I Y K T G L L
811 tcaggattagatataatggaagtgaacccatccctggggaagaca
S G L D I M E V N P S L G K T
856 ccagaagaagtaactcgaacagtgaacacagcagttgcaataacc
P E E V T R T V N T A V A I T
901 ttggcttggttcggacttgctcgggagggtaatcacaagcctatt
L A C F G L A R E G N H K P I
946 gactaccttaacccacctaagtaa 969
D Y L N P P K *

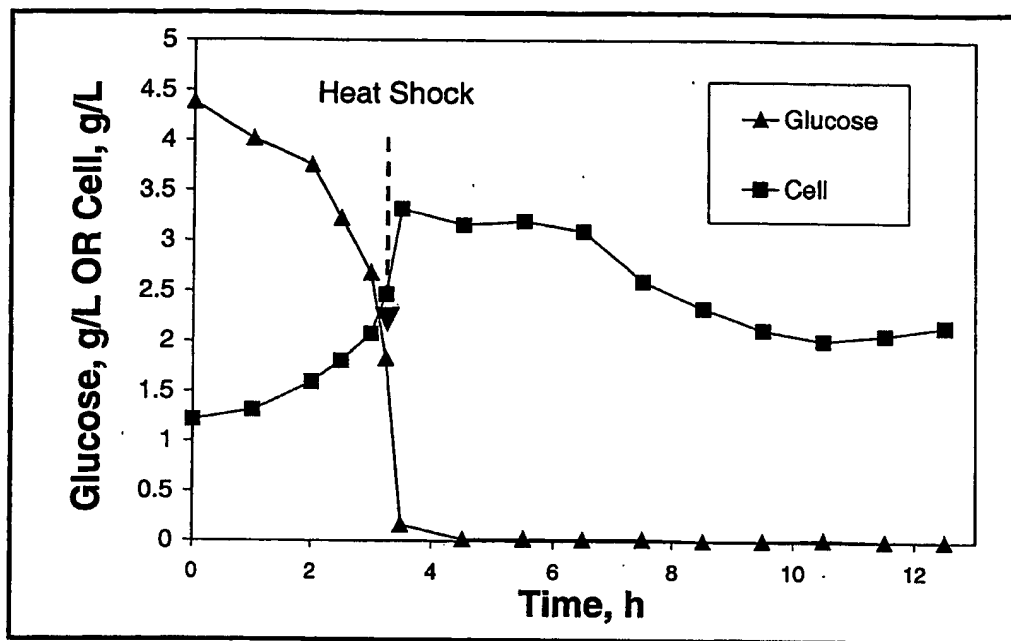
Fig. 3



6/46

10/518223

Fig. 4A



10/518223

7/46

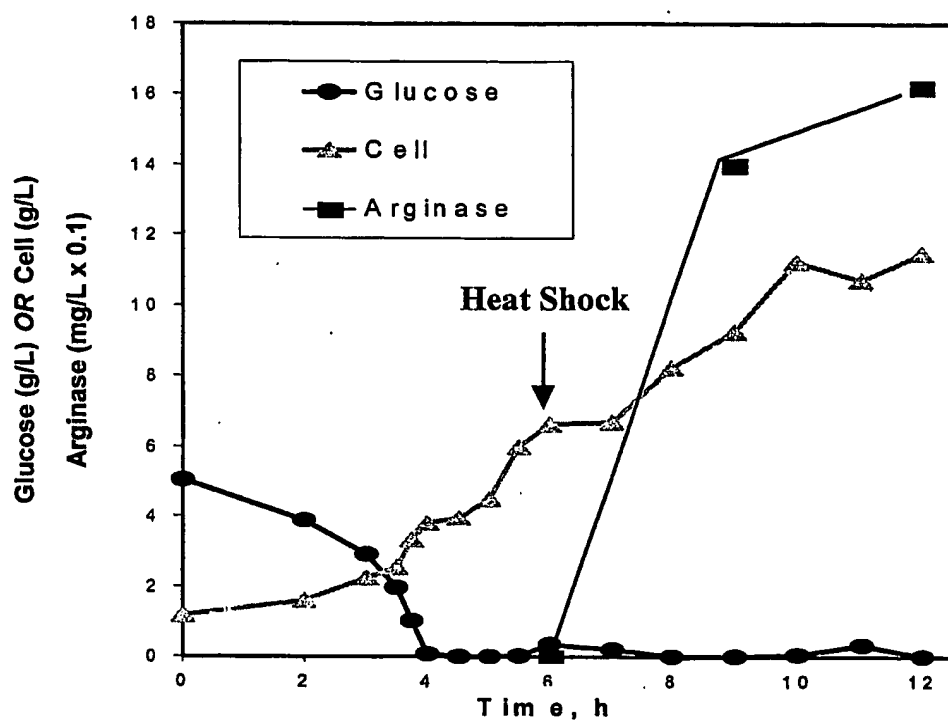
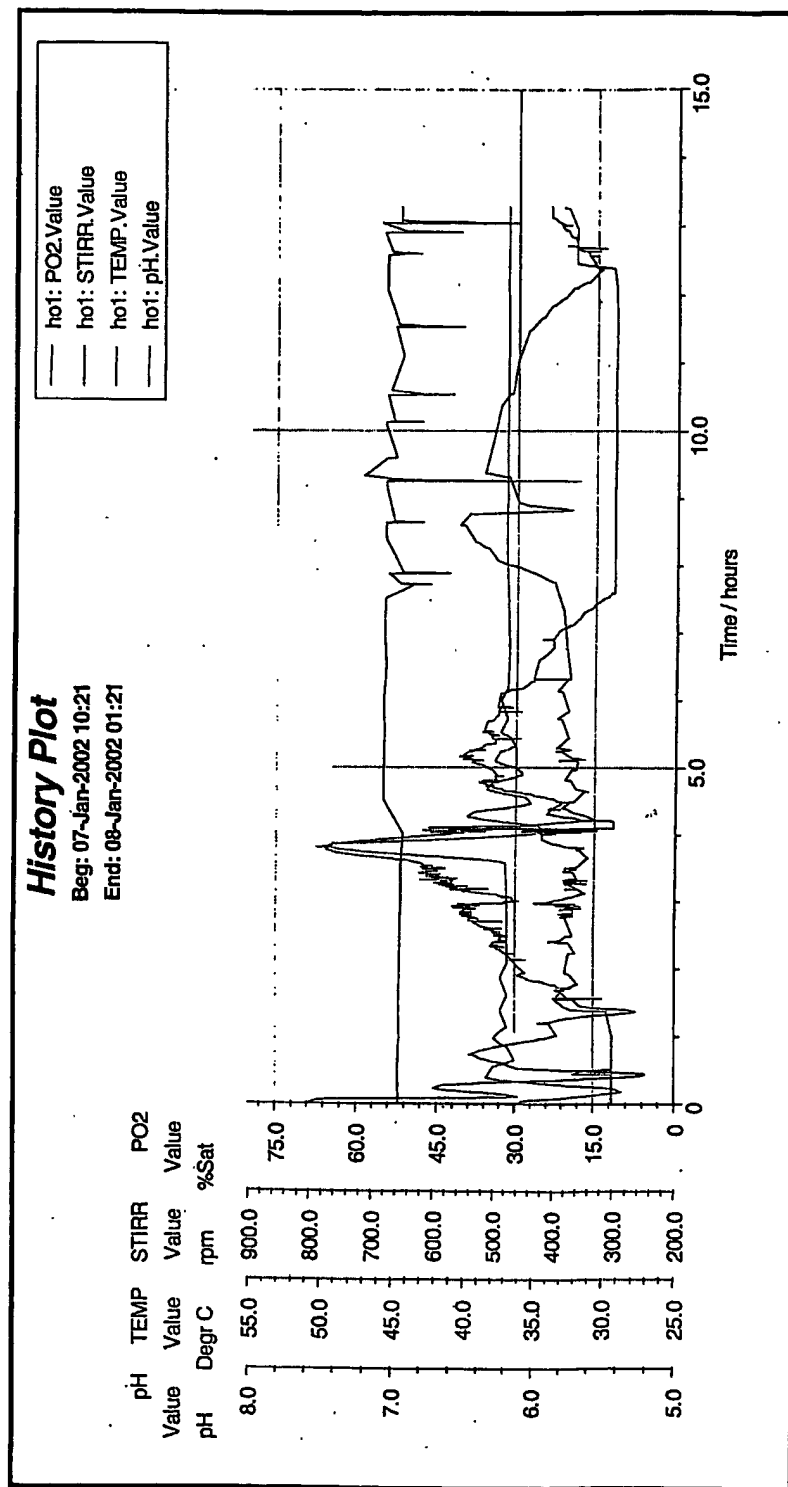


Fig. 4B

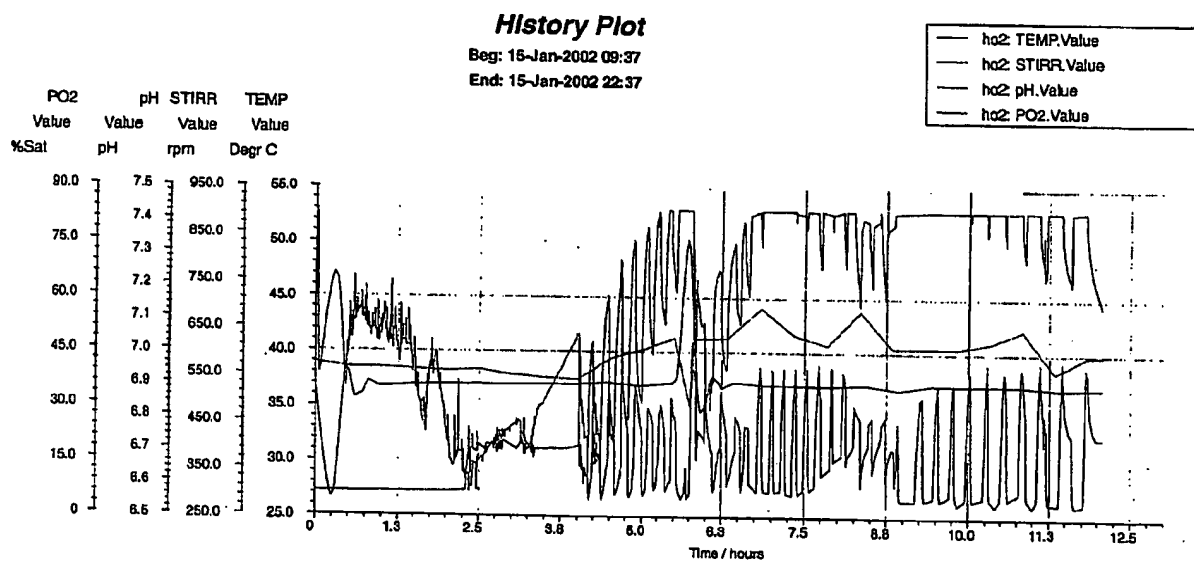
Fig. 5A



10/518223

9/46

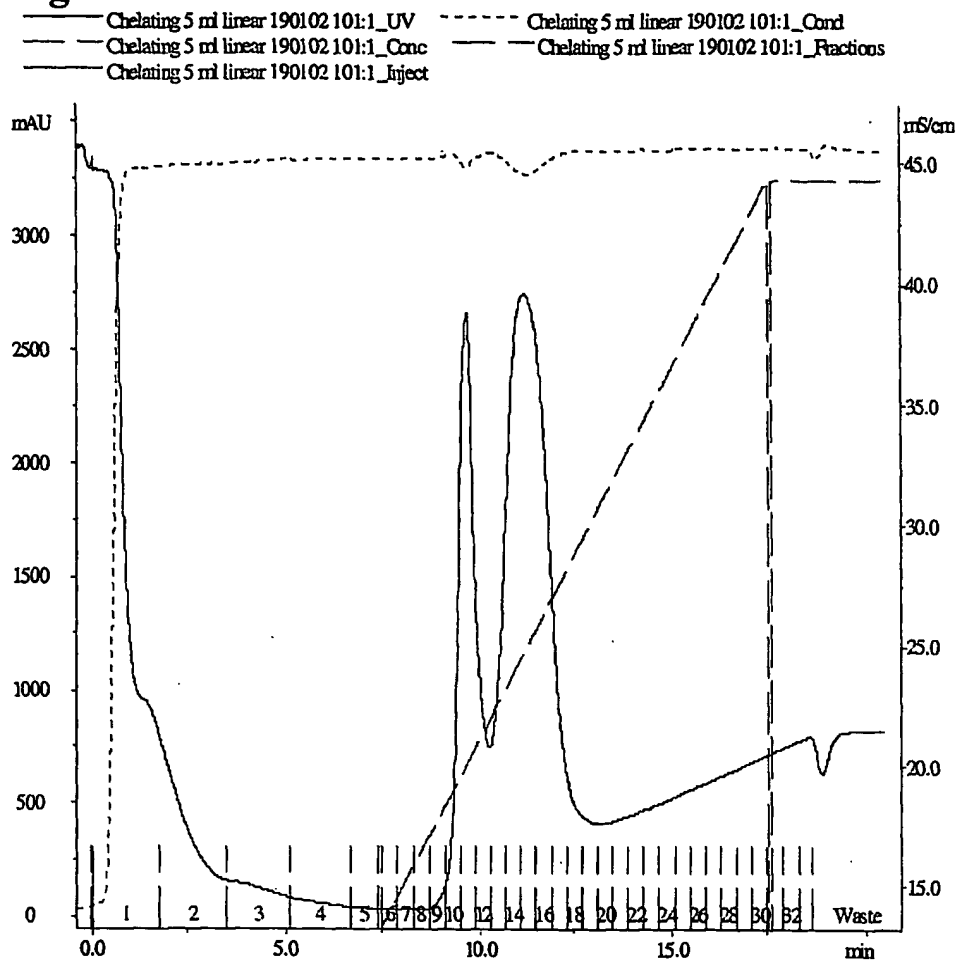
Fig. 5B



10/46

10/518223

Fig. 6A



Column HiTrap_Chelating_1x5_ml
 Pressure_limit 0.8 (MPa)
 Flow 5.00 (ml/min)
 UV_Averaging_time 2.60
 Start_ConcB 0.00 (%B)
 Equilibrate_with 0.5 (CV)
 Flowthrough_FracSize 8 (ml)
 Empty_loop_with 0 (ml)
 Wash_column_with 7 (CV)
 Start_Frac_at 0 (%B)
 Eluate_FracSize 2 (ml)
 End_Frac_at 100 (%B)
 Target_ConcB_1 100 (%B)
 Length_of_gradient_1 10 (base)
 Target_ConcB_2 0 (%B)
 Length_of_gradient_2 0 (base)
 Target_ConcB_3 0 (%B)
 Length_of_gradient_3 0.00 (base)
 Conc_of_eluent_B 100 (%B)
 Clean_with 4 (CV)
 Reequilibrate_conc 0.00 (%B)
 Reequilibrate_with 0.00 (CV)

11/46

10/518223

Fig. 6B

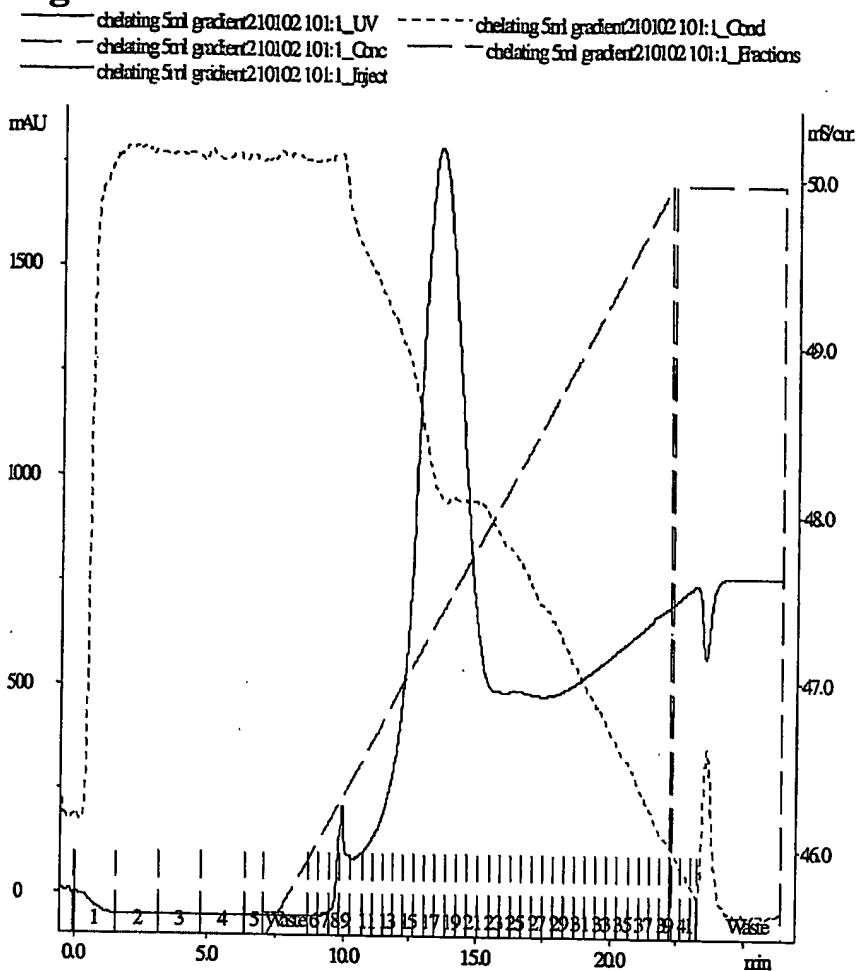
M 11 12 13 14 15 16 17 18 M 19 20 21 23 25 27 29 31



12/46

10/518223

Fig. 7A

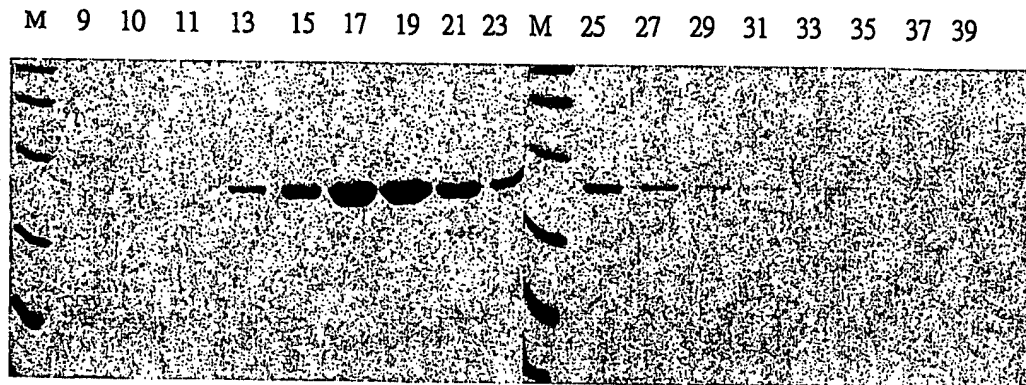


Column HiTrap_Chelating_1x6_ml
 Pressure_limit 0.8 (MPa)
 Flow 5.00 (ml/min)
 UV_Averaging_time 2.60
 Start_ConcB 0.00 (%B)
 Equilibrate_with 0.5 (CV)
 Flowthrough_FracSize 8 (ml)
 Empty_loop_with 0 (ml)
 Wash_column_with 7 (CV)
 Start_Frac_at 10 (%B)
 Eluate_FracSize 2 (ml)
 End_Frac_at 100 (%B)
 Target_ConcB_1 100 (%B)
 Length_of_gradient_1 15 (base)
 Target_ConcB_2 0 (%B)
 Length_of_gradient_2 0.00 (base)
 Target_ConcB_3 0 (%B)
 Length_of_gradient_3 0.00 (base)
 Conc_of_eluent_B 100 (%B)
 Clean_with 4.00 (CV)
 Reequilibrate_conc 0.00 (%B)
 Reequilibrate_with 0.00 (CV)

13/46

10/518223

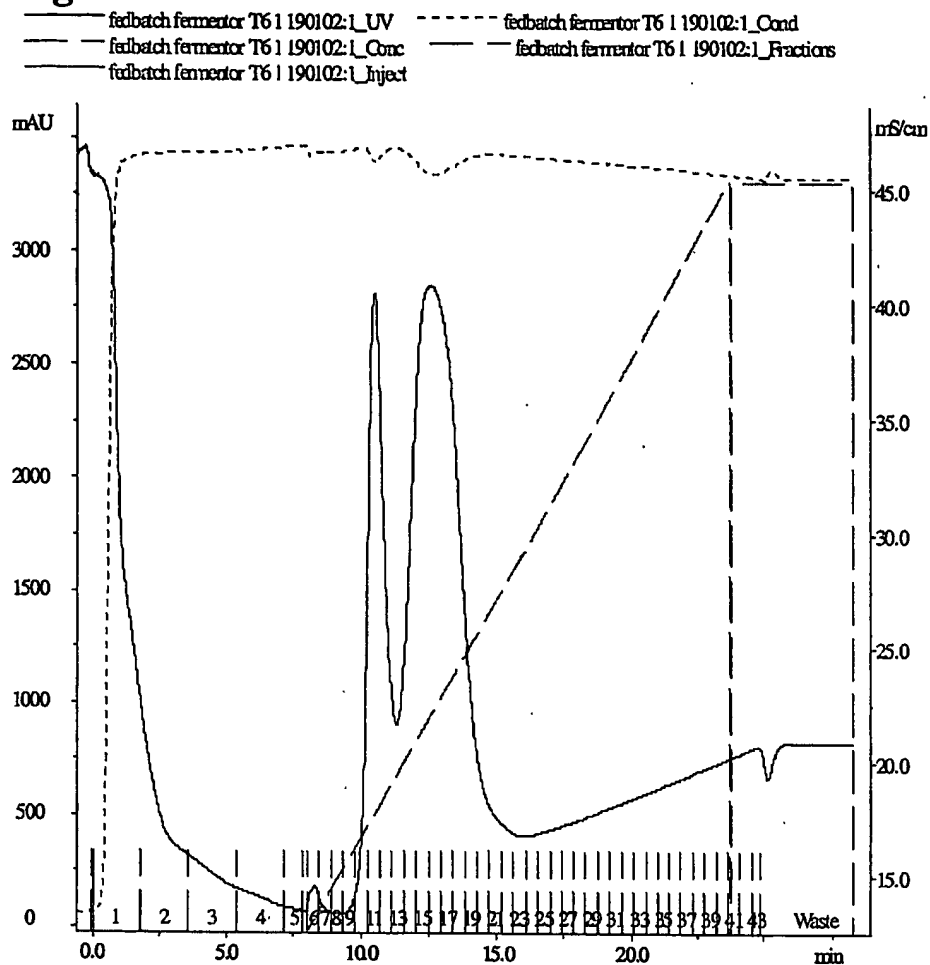
Fig. 7B



14/46

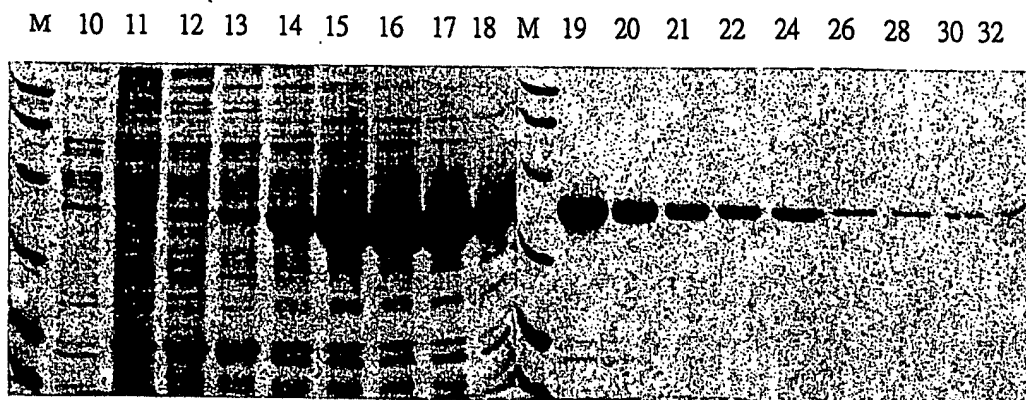
10/518223

Fig. 8A



Column HiTrap_Chelating_1x5_ml
 Pressure_limit 0.8 (MPa)
 Flow 5.00 (ml/min)
 UV_Averaging_time 2.60
 Start_ConcB 0.00 (%B)
 Equilibrate_with 0.5 (CV)
 Flowthrough_FracSize 8 (ml)
 Empty_loop_with 0 (ml)
 Wash_column_with 7 (CV)
 Start_Frac_at 0 (%B)
 Eluate_FracSize 2 (ml)
 End_Frac_at 100 (%B)
 Target_ConcB_1 100 (%B)
 Length_of_gradient_1 14 (base)
 Target_ConcB_2 0 (%B)
 Length_of_gradient_2 0.00 (base)
 Target_ConcB_3 0 (%B)
 Length_of_gradient_3 0.00 (base)
 Conc_of_eluent_B 100 (%B)
 Clean_with 4.00 (CV)
 Reequilibrate_conc 0.00 (%B)
 Reequilibrate_with 0.00 (CV)

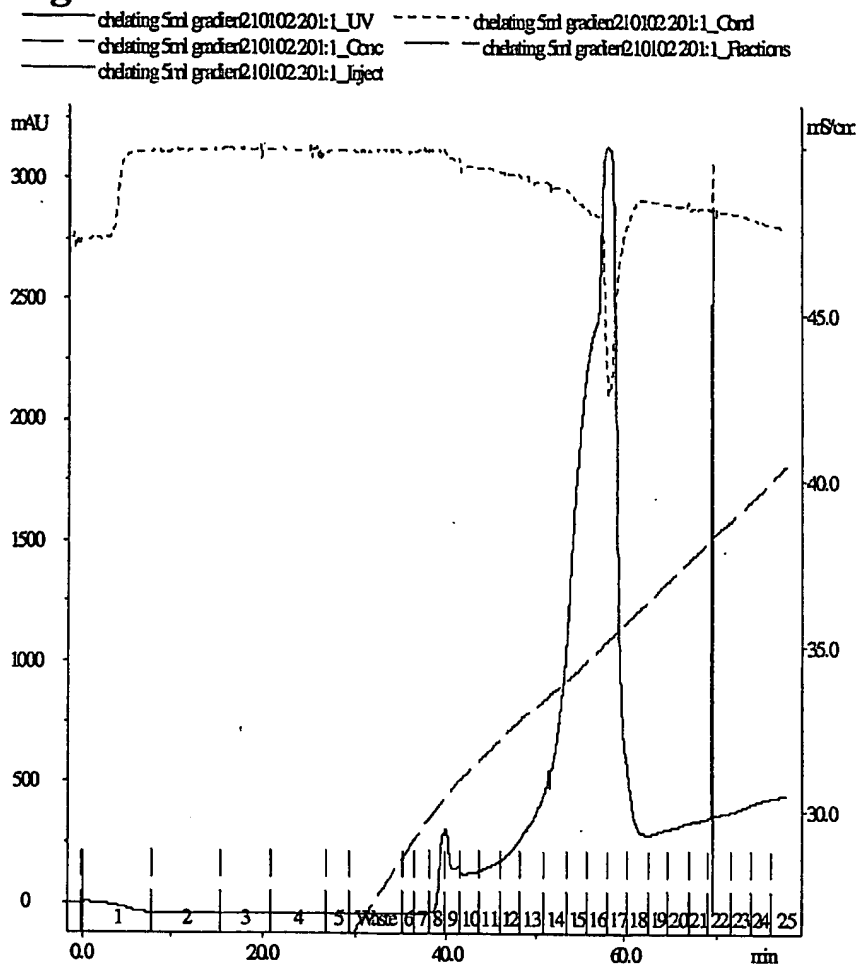
Fig. 8B



16/46

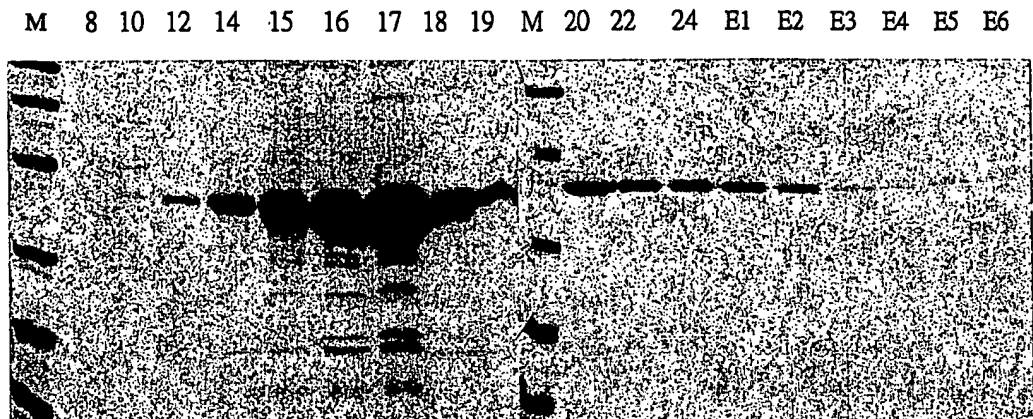
10/518223

Fig. 9A



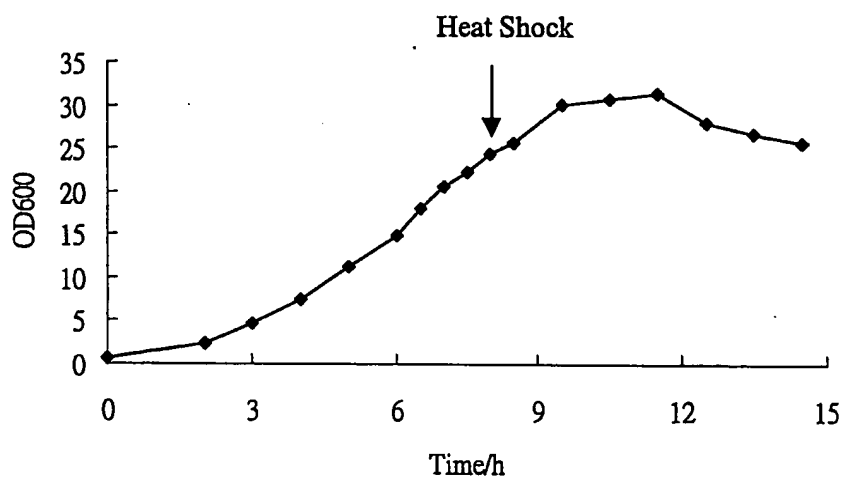
Column HiTrap_Chelating_1x5_ml
 Pressure_limit 0.8 {MPa}
 Flow 5.00 {ml/min}
 UV_Averaging_time 2.60
 Start_ConcB 0.00 {%B}
 Equilibrate_with 0.2 {CV}
 Flowthrough_FracSize 8 {ml}
 Empty_loop_with 0 {ml}
 Wash_column_with 7 {CV}
 Start_Frac_at 10 {%B}
 Eluate_FracSize 2 {ml}
 End_Frac_at 100 {%B}
 Target_ConcB_1 100 {%B}
 Length_of_gradient_1 15 {base}
 Target_ConcB_2 0 {%B}
 Length_of_gradient_2 0.00 {base}
 Target_ConcB_3 0 {%B}
 Length_of_gradient_3 0.00 {base}
 Conc_of_eluent_B 100 {%B}
 Clean_with 4.00 {CV}
 Reequilibrate_conc 0.00 {%B}
 Reequilibrate_with 0.00 {CV}

Fig. 9B



10/518223

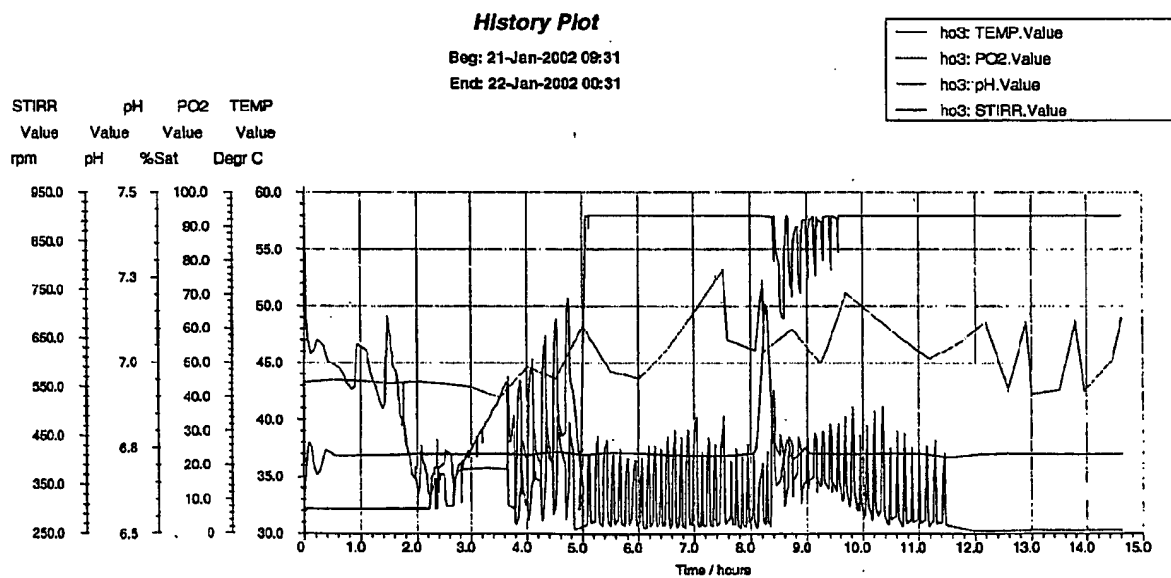
18/46

Fig. 10

10/518223

19/46

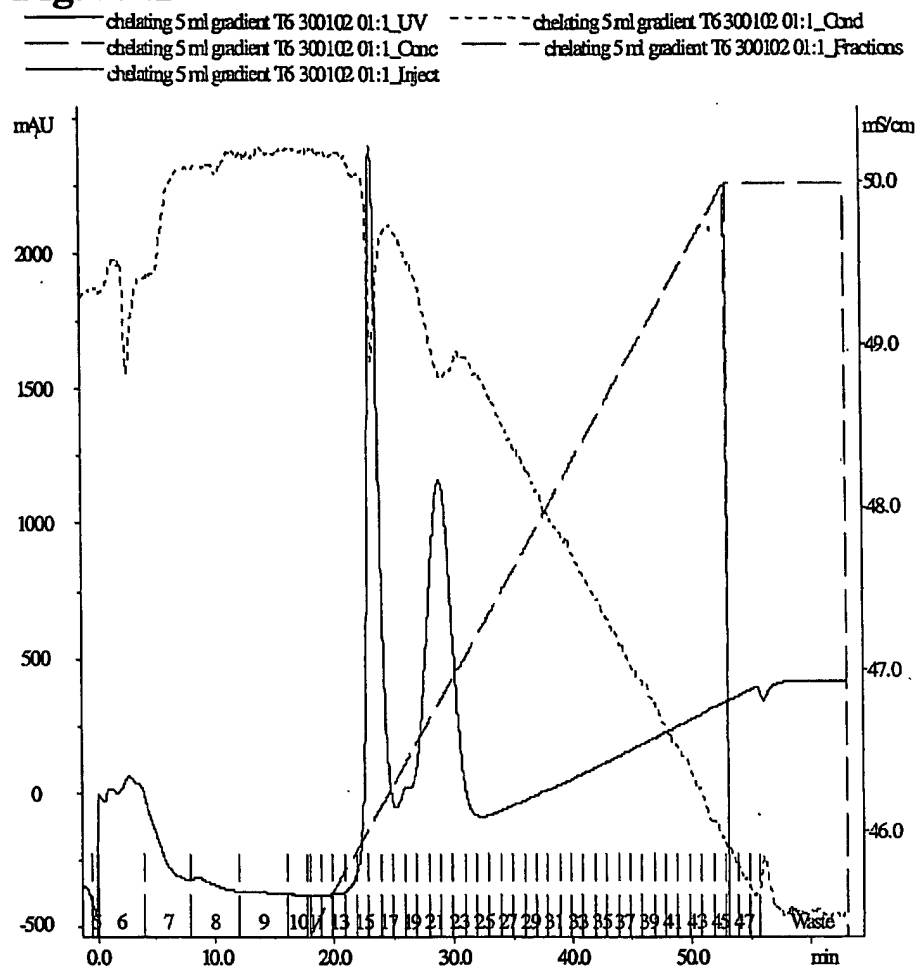
Fig. 11



10/518223

20/46

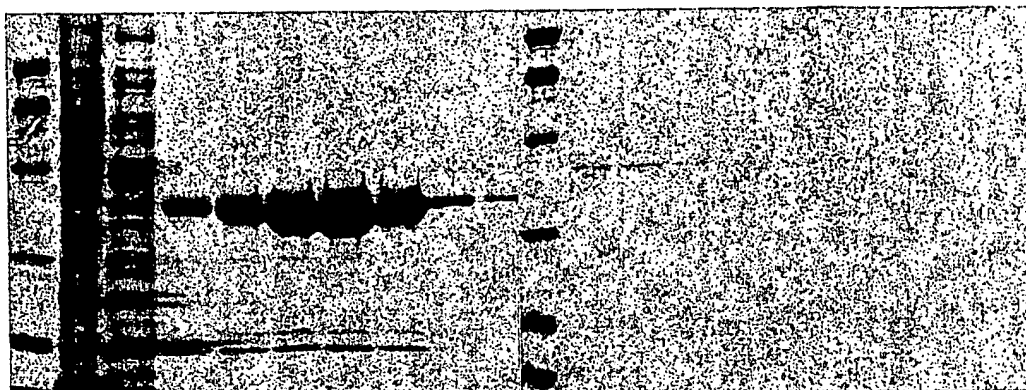
Fig. 12A



Column HITrap_Chelating_1x5_ml
 Pressure_limit 0.5 (MPa)
 Flow 2 (ml/min)
 UV_Averaging_time 2.60
 Start_ConcB 0.00 (%B)
 Equilibrate_with 2 (CV)
 Flowthrough_FracSize 8 (ml)
 Empty_loop_with 0 (ml)
 Wash_column_with 7 (CV)
 Start_Frac_at 0 (%B)
 Eluate_FracSize 2 (ml)
 End_Frac_at 100 (%B)
 Target_ConcB_1 100 (%B)
 Length_of_gradient_1 14 (base)
 Target_ConcB_2 0 (%B)
 Length_of_gradient_2 0.00 (base)
 Target_ConcB_3 0 (%B)
 Length_of_gradient_3 0.00 (base)
 Conc_of_eluent_B 100 (%B)
 Clean_with 4.00 (CV)
 Reequilibrate_conc 0.00 (%B)
 Reequilibrate_with 0.00 (CV)

Fig. 12B

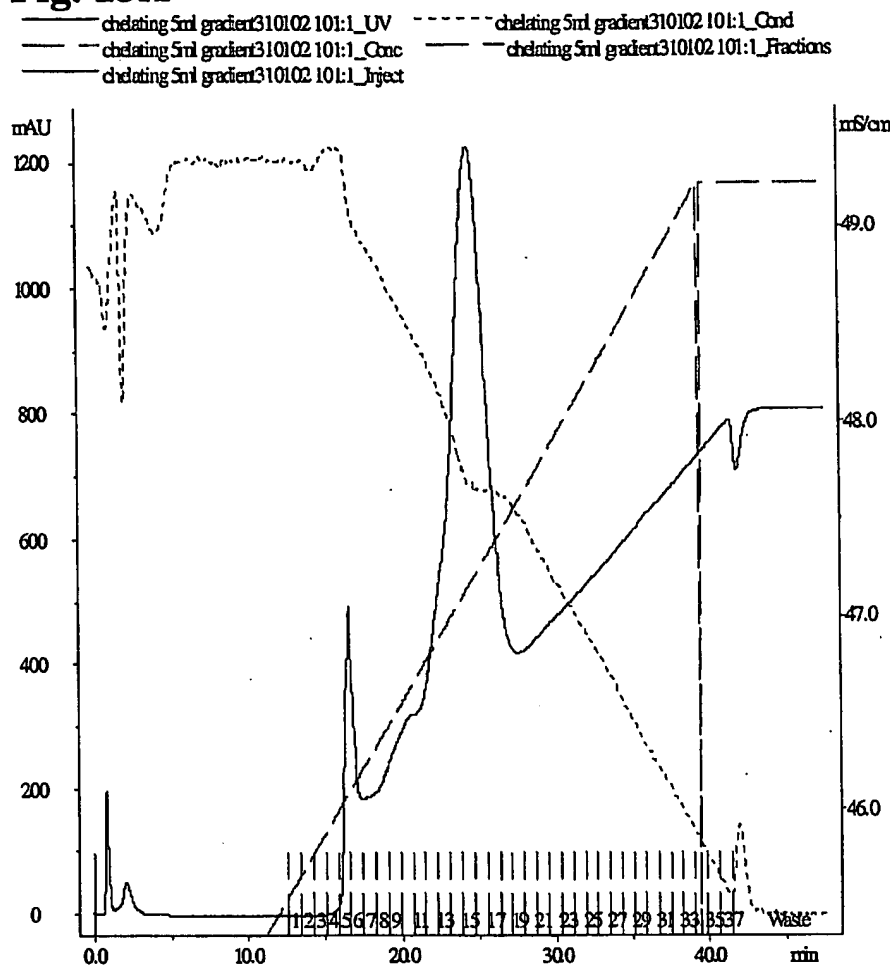
M crude 16 19 20 21 22 23 25 27 M 29 31 33 35 37 39 41 43 45



10/518223

22/46

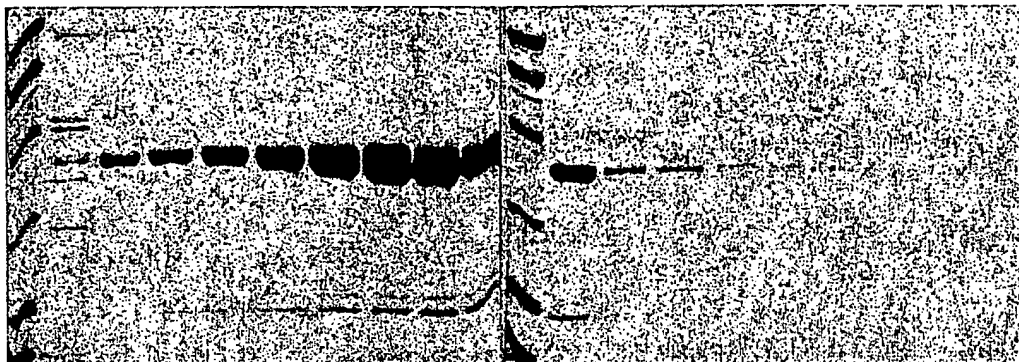
Fig. 13A



Column HiTrap_Chelating_1x5_ml
 Pressure_limit 0.8 {MPa}
 Flow 2.5 {ml/min}
 UV_Averaging_time 2.60
 Start_ConcB 0.00 {%B}
 Equilibrate_with 0 {CV}
 Flowthrough_FracSize 0 {ml}
 Empty_loop_with 0 {ml}
 Wash_column_with 5.5 {CV}
 Start_Frac_at 5 {%B}
 Eluate_FracSize 2 {ml}
 End_Frac_at 100 {%B}
 Target_ConcB_1 100 {%B}
 Length_of_gradient_1 14 {base}
 Target_ConcB_2 0 {%B}
 Length_of_gradient_2 0.00 {base}
 Target_ConcB_3 0 {%B}
 Length_of_gradient_3 0.00 {base}
 Conc_of_eluent_B 100 {%B}
 Clean_with 4.00 {CV}
 Reequilibrate_conc 0.00 {%B}
 Reequilibrate_with 0.00 {CV}

Fig. 13B

M 7 9 11 12 13 14 15 16 17 M 18 20 22 24 26 28 30 32 34

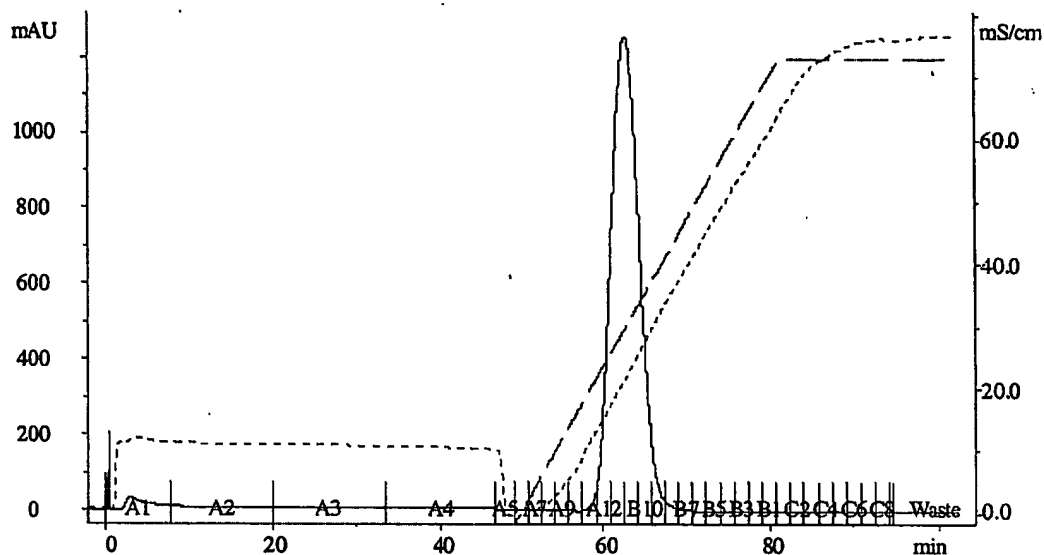


24/46

10/518223

Fig. 14A

— SP sepharose 1ml linear gradient 010202 1001:1_UV1_280nm
 - - - SP sepharose 1ml linear gradient 010202 1001:1_Conc
 — SP sepharose 1ml linear gradient 010202 1001:1_Conc
 — SP sepharose 1ml linear gradient 010202 1001:1_Fractions
 — SP sepharose 1ml linear gradient 010202 1001:1_Inject



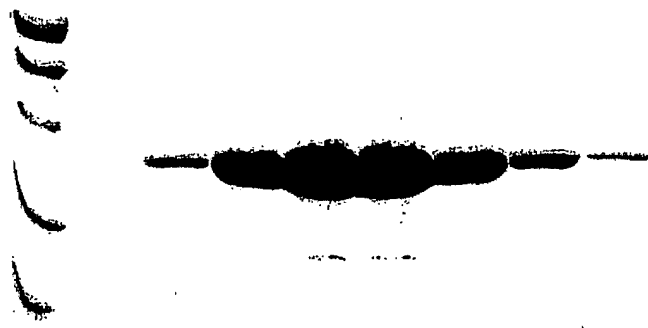
Column HiTrap_SP_FF_1_ml
 Flow_Rate 1.00 {ml/min}
 Column_PressureLimit 0.40 {MPa}
 Wavelength_1 280 {nm}
 Wavelength_2 OFF {nm}
 Wavelength_3 OFF {nm}
 Averaging_Time_UV 5.12 {sec}
 Pump_A_Inlet A1
 Pump_B_Inlet B1
 Wash_Inlet_A1_ OFF
 Wash_Inlet_A2_ OFF
 Wash_Inlet_B1_ OFF
 Wash_Inlet_B2_ OFF
 Start_ConcB 0 {%B}
 Compensation_Volume 8 {ml}
 Equilibrate_with 0 {CV}
 Flowthrough_TubeType 18mm
 Flowthrough_FracSize 8 {ml}
 Flowthrough_StartAt FirstTube
 Empty_loop_with 31.500 {ml}
 Wash_column_with 2 {CV}
 _Start_Frac_at 0 {%B}
 _End_Frac_at 100 {%B}
 TubeType_EluateFrac 18mm
 Eluate_Frac_Size 1 {ml}
 EluateFrac_StartAt NextTube
 Target_ConcB 100 {%B}
 Length_of_Gradient 20.00 {base}
 Gradient_Delay 8 {ml}
 Clean_with 5.00 {CV}

25/46

10/518223

Fig. 14B

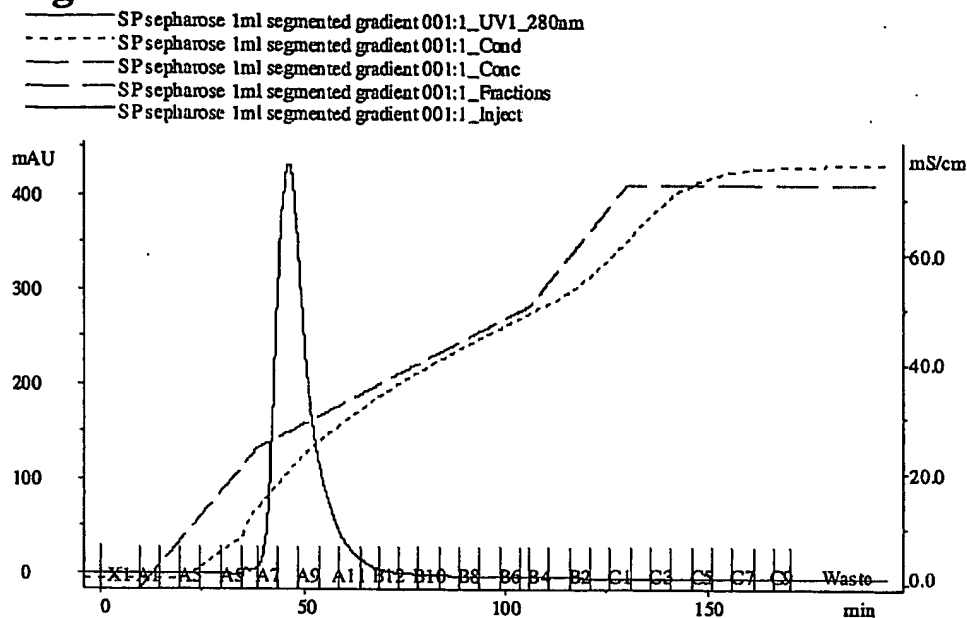
M A11 A12 B12 B11 B10 B9 B8 B7



26/46

10/518223

Fig. 15A

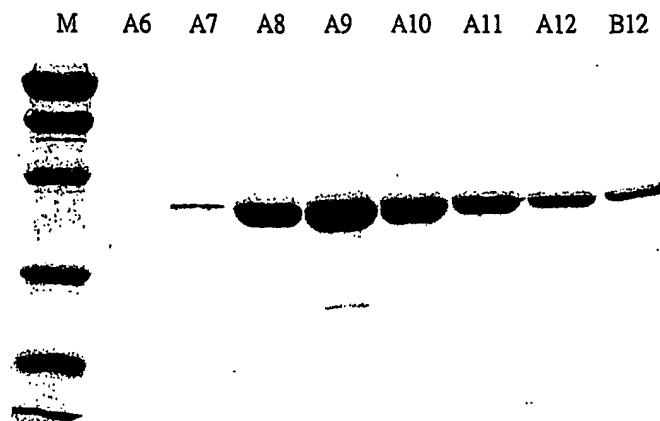


Column HiTrap_SP_FF_1_ml
 Flow_Rate 0.40 {ml/min}
 Column_PressureLimit 0.50 {MPa}
 Wavelength_1 280 {nm}
 Wavelength_2 OFF {nm}
 Wavelength_3 OFF {nm}
 Averaging_Time_UV 5.12 {sec}
 Pump_A_Inlet A1
 Pump_B_Inlet B1
 Wash_Inlet_A1_ OFF
 Wash_Inlet_A2_ OFF
 Wash_Inlet_B1_ OFF
 Wash_Inlet_B2_ OFF
 Start_ConcB 0 {%B}
 Compensation_Volume 8 {ml}
 Equilibrate_with 0 {CV}
 Flowthrough_TubeType 30mm
 Flowthrough_FracSize 40 {ml}
 Flowthrough_StartAt TubeNumber[X.1]
 Empty_loop_with 0.000 {ml}
 Wash_column_with 2 {CV}
 1_Tube_Type 18mm
 1_Fraction_Size 1 {ml}
 1_Start_at FirstTube
 Target_ConcB_1 35 {%B}
 Length_of_Gradient_1 8.00 {base}
 2_Tube_Type 18mm
 2_Fraction_Size 1 {ml}
 2_Start_at NextTube
 Target_ConcB_2 70 {%B}
 Length_of_Gradient_2 14.00 {base}
 3_Tube_Type 18mm
 3_Fraction_Size 1 {ml}
 3_Start_at NextTube
 Target_ConcB_3 100 {%B}
 Length_of_Gradient_3 5.00 {base}
 Gradient_Delay 8 {ml}
 Clean_with 5.00 {CV}

27/46

10/518223

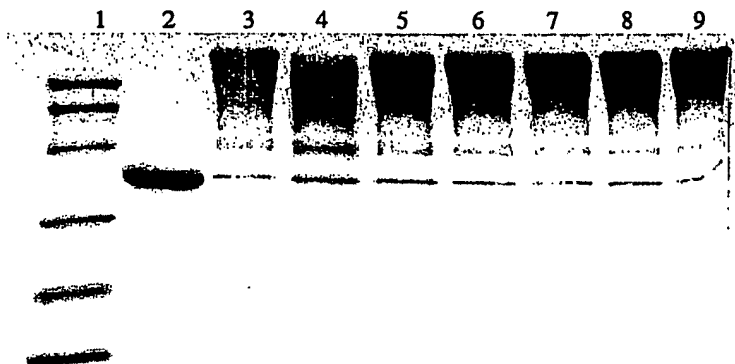
Fig. 15B



28/46

10/518223

Fig. 16A



29/46

10/518223

Fig. 16B

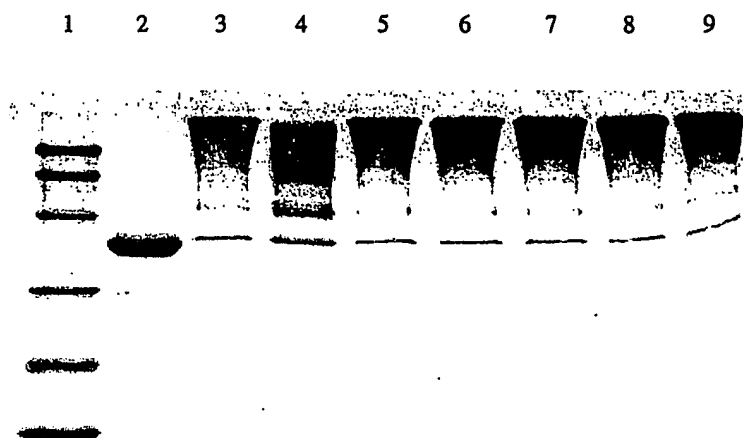
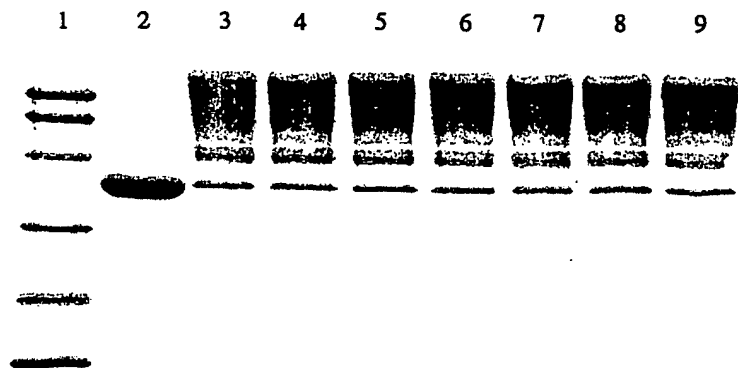


Fig. 17A



Fig. 17B



32/46

10/518223

Fig. 18A

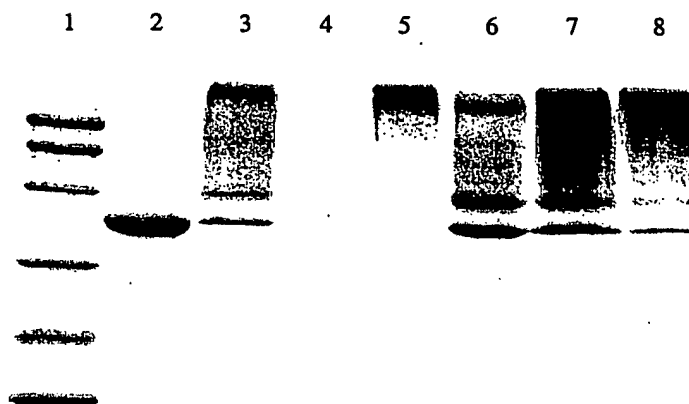
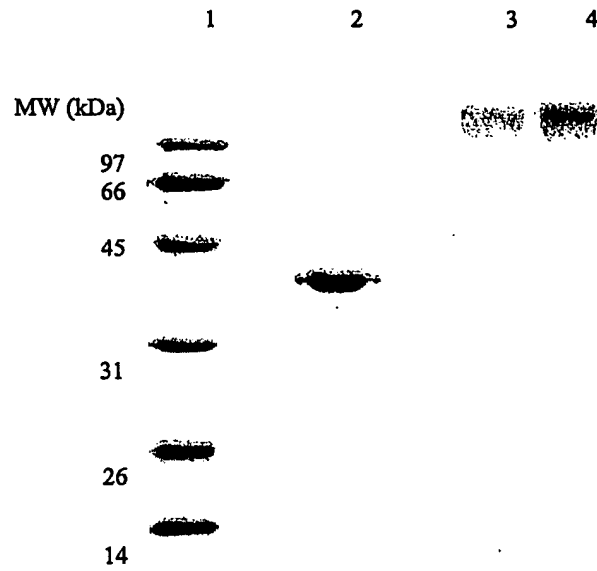


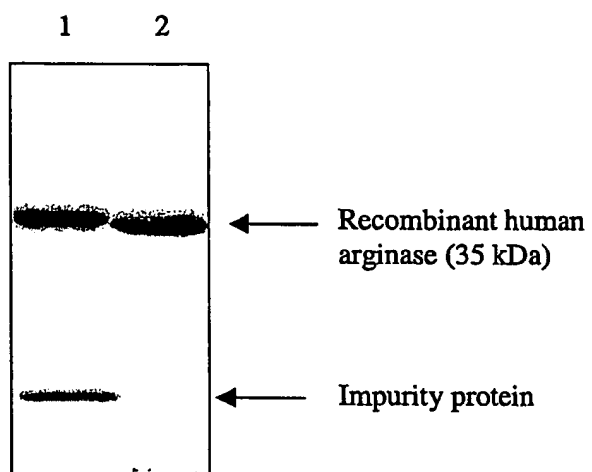
Fig. 18B



34/46

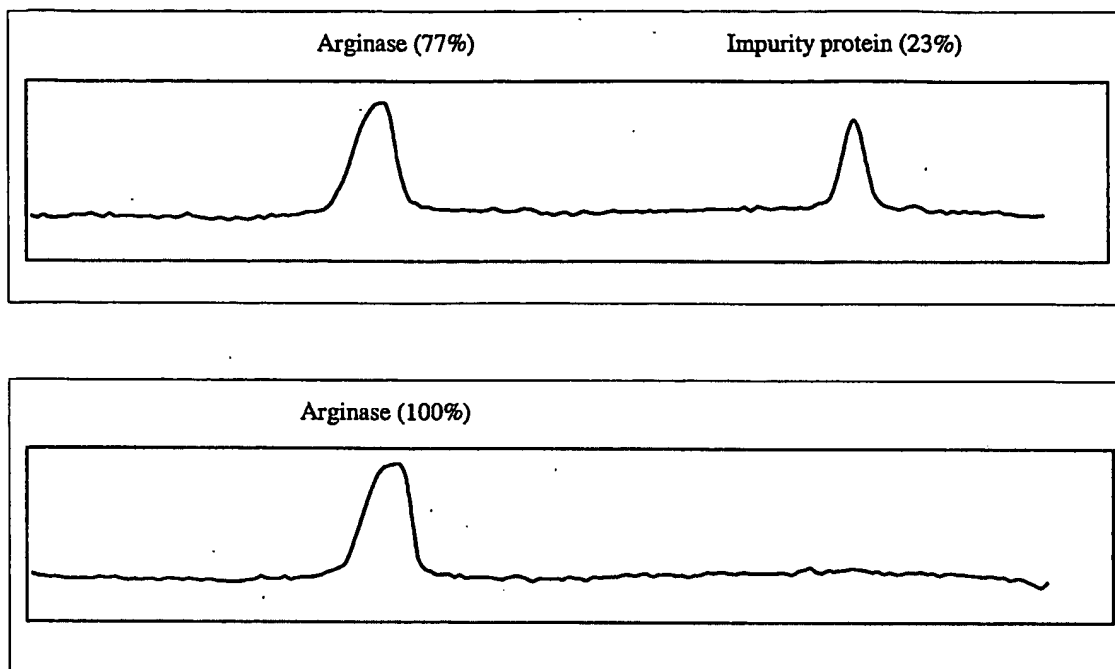
10/518223

Fig. 19A



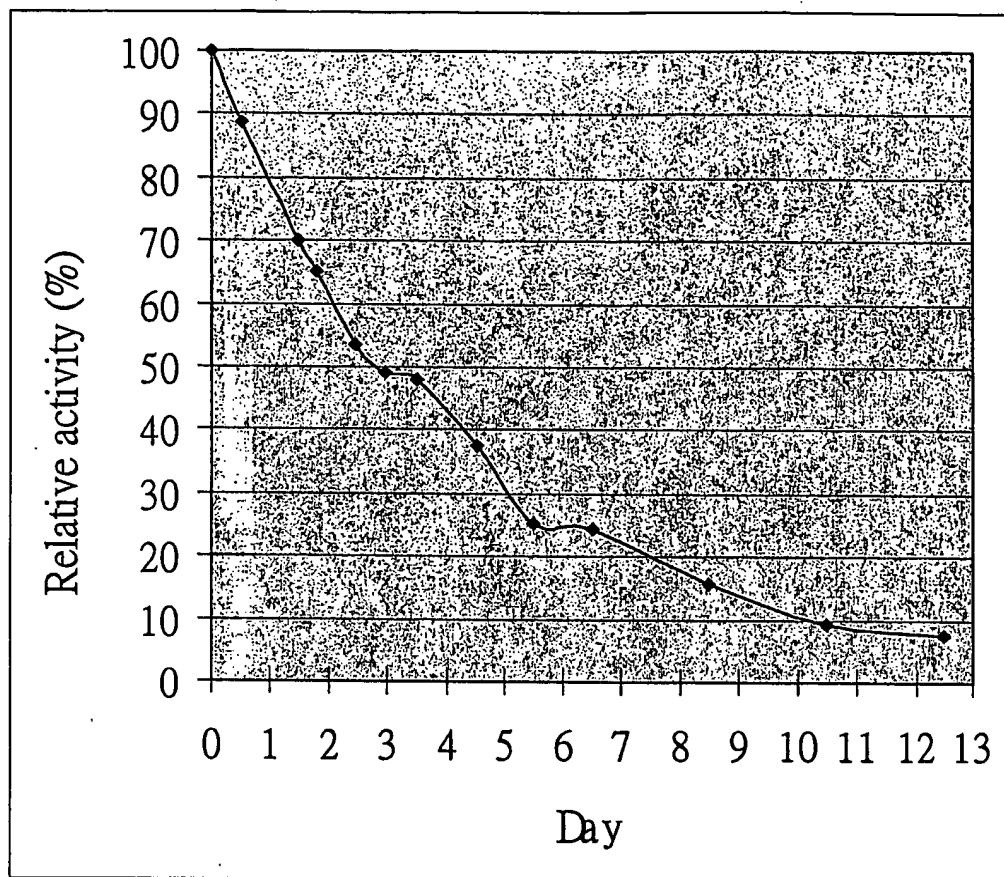
35/46

10/518223

Fig. 19B

36/46

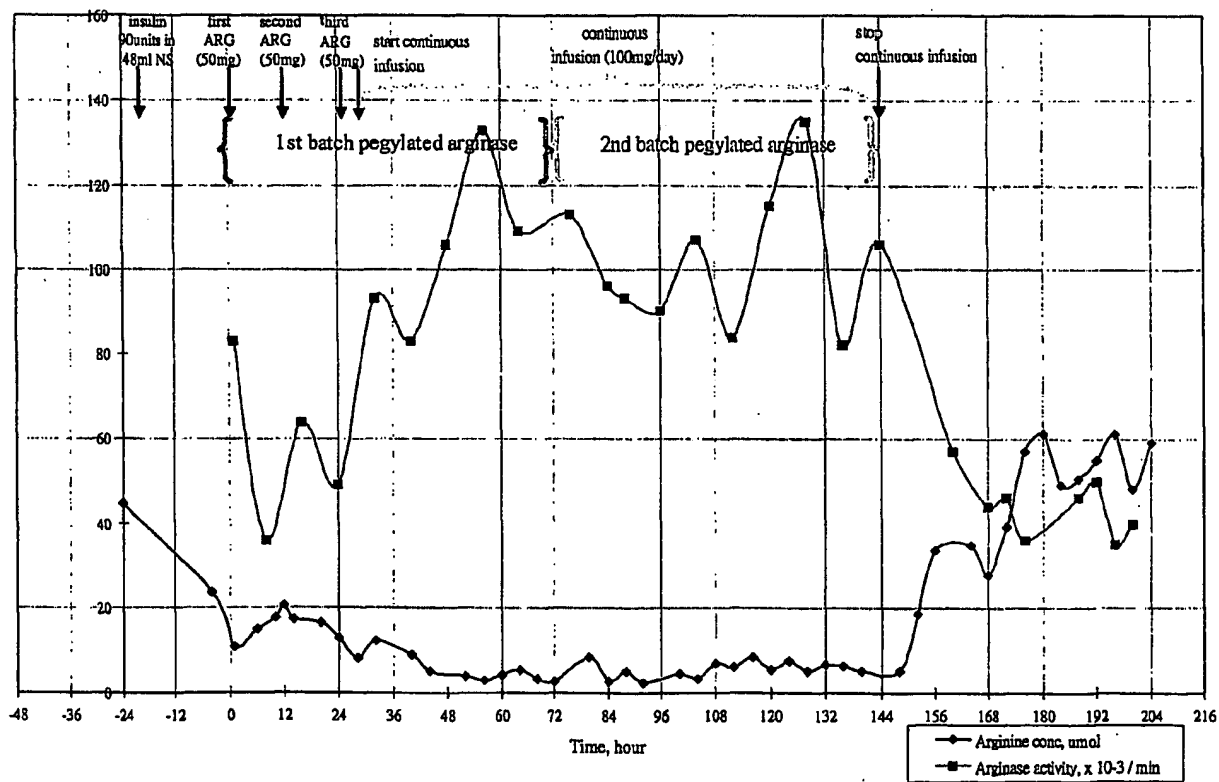
10/518223

Fig. 20

10/518223

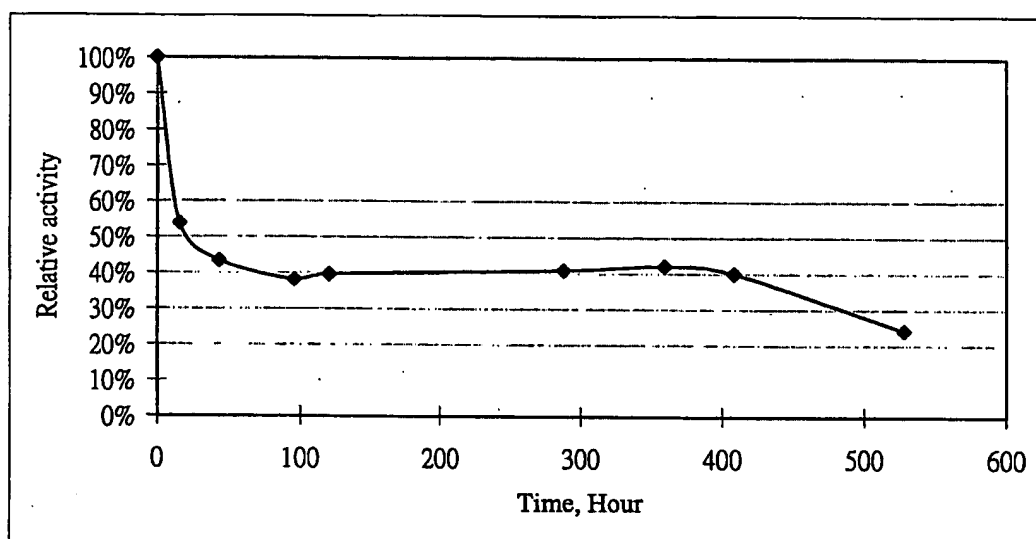
37/46

Fig. 21



38/46

10/518223

Fig. 22

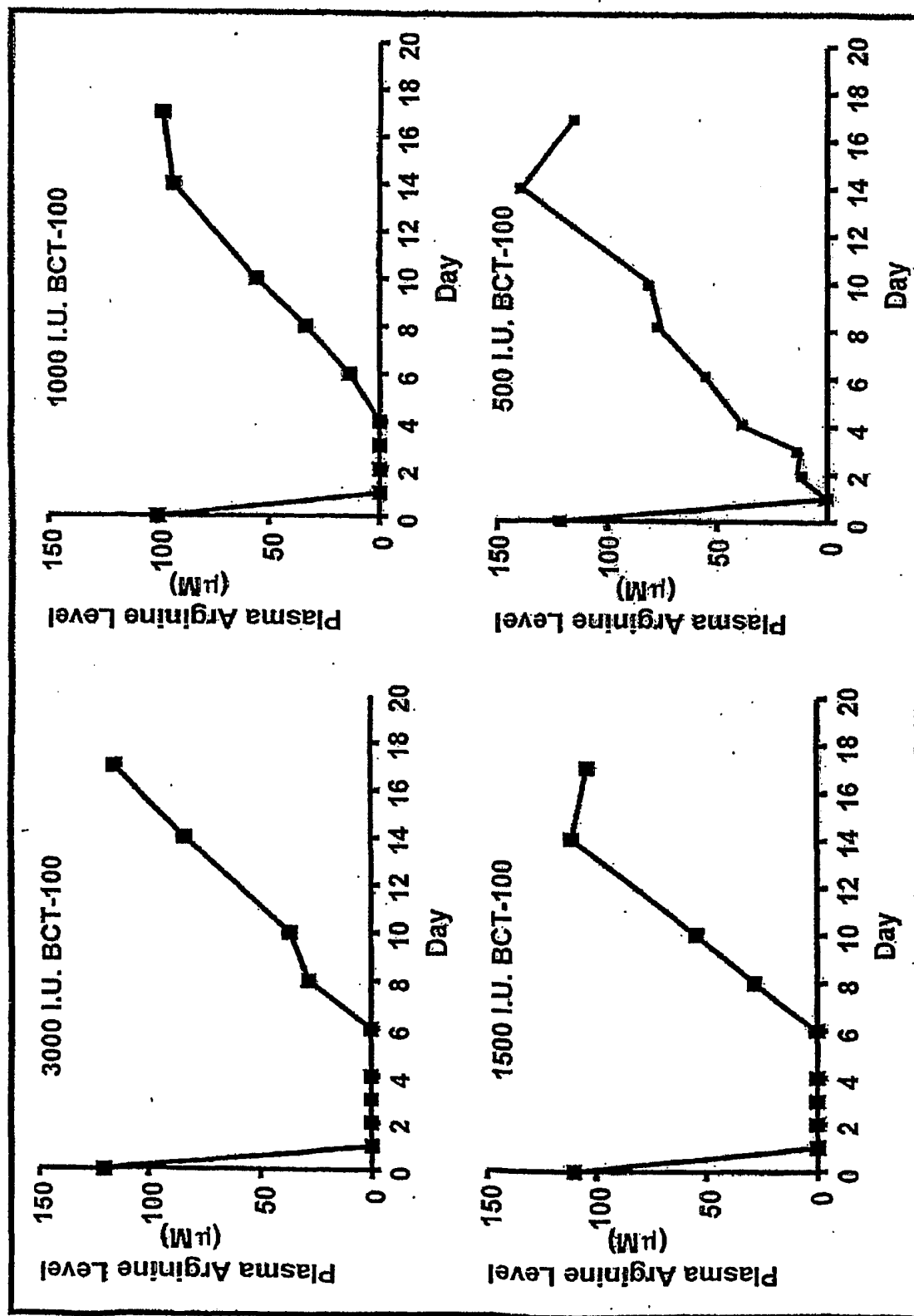


Fig. 23

10/518223

40/46

Drug effect on Hep3B

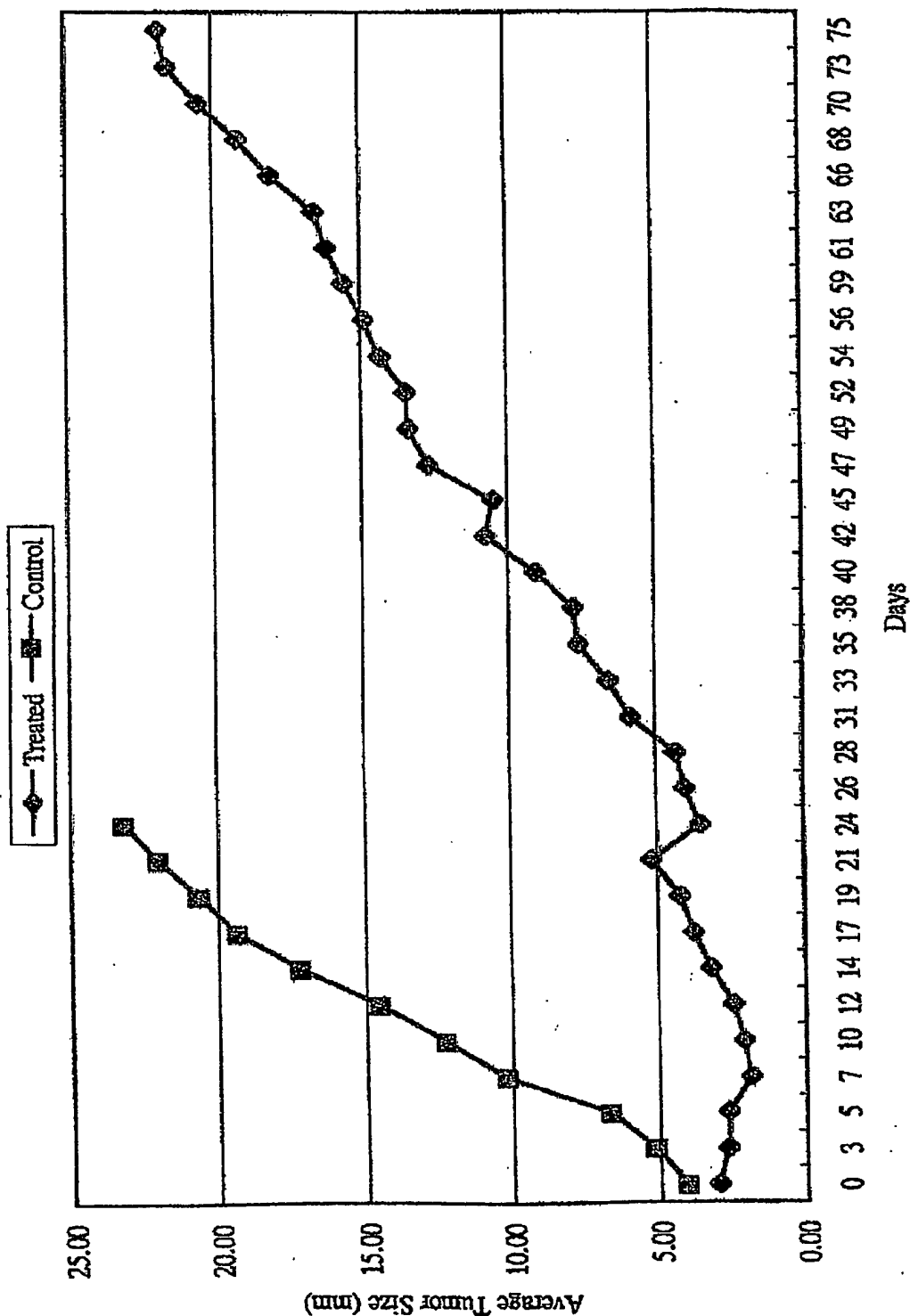


Fig.24

10/518223

41/46

Drug effect on PLC/PRF/5 -Size changes

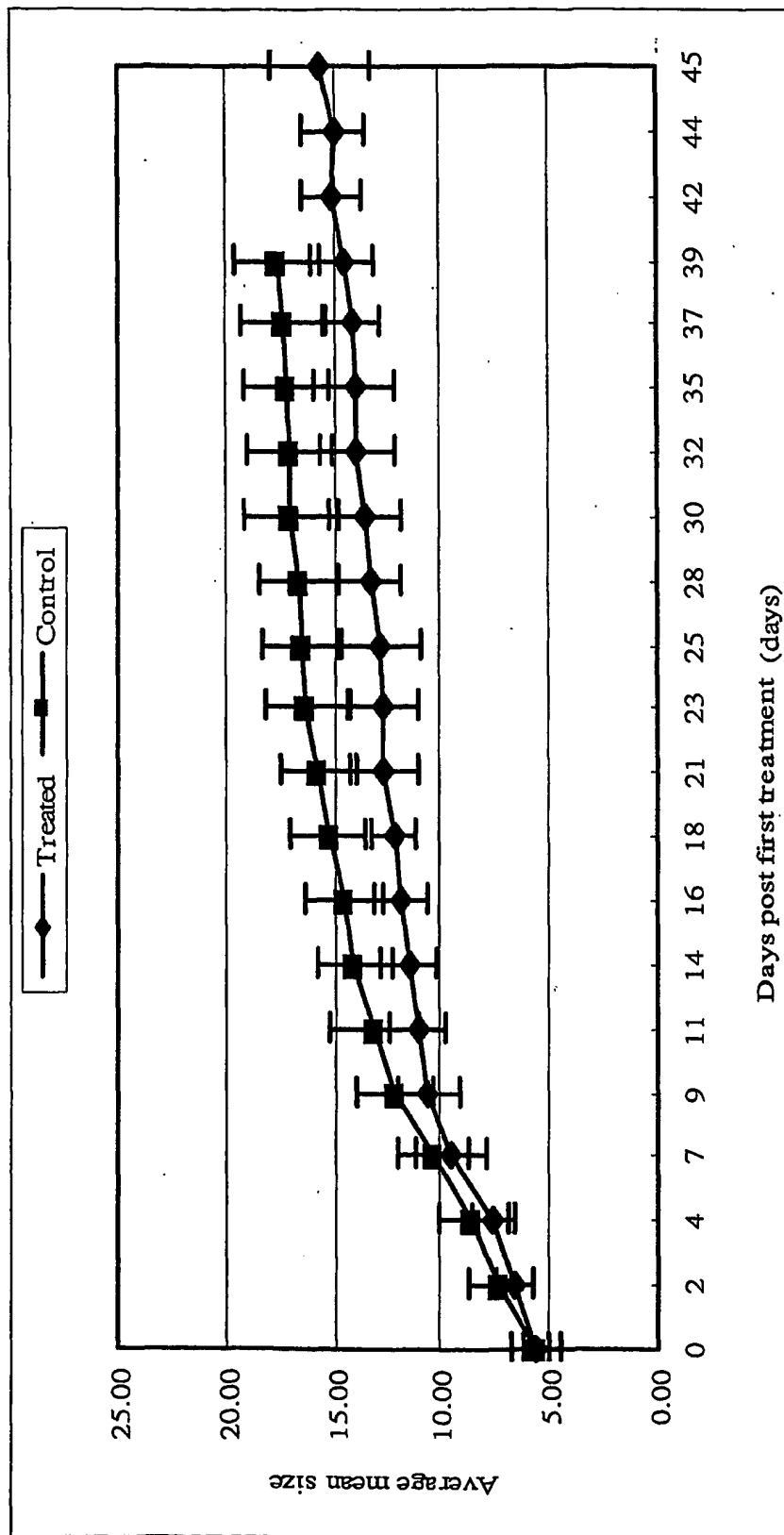


Fig. 25A

10/518223

42/46

Drug effect on PLC/PRF/5 – Weight changes

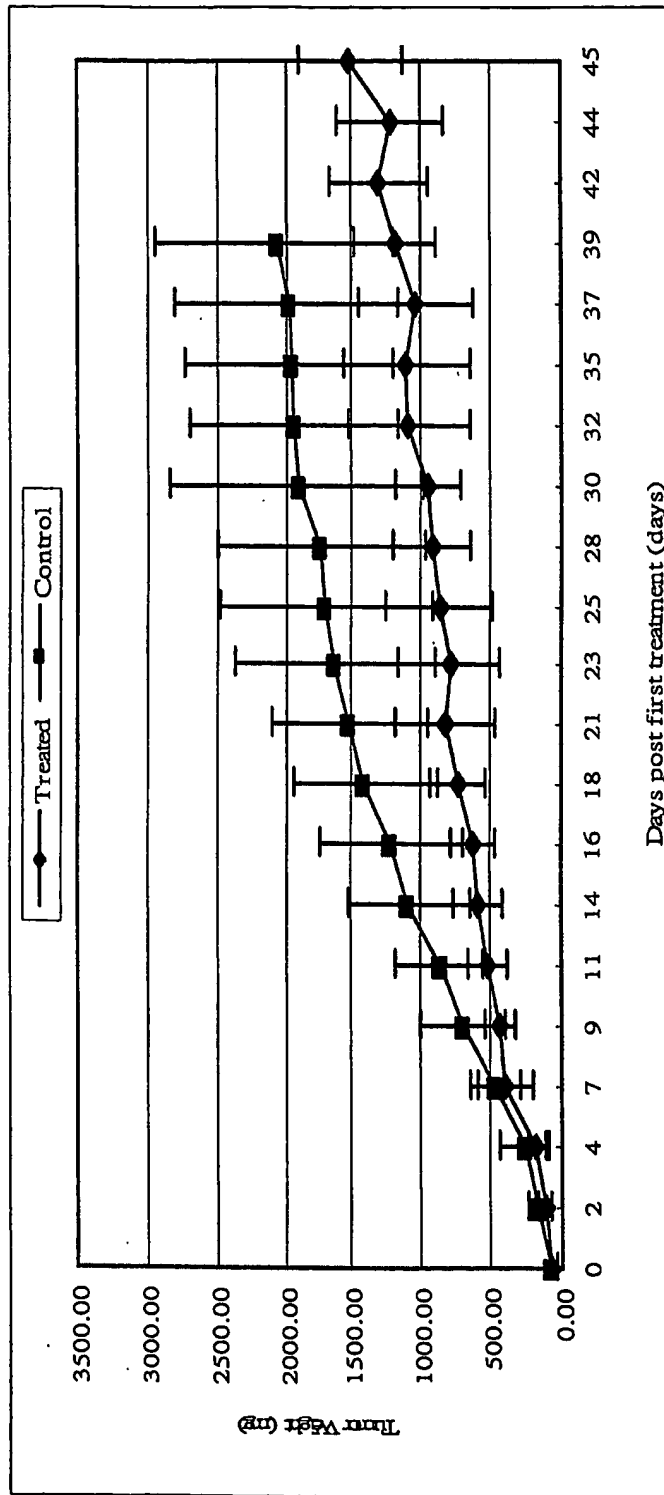


Fig. 25B

Drug effect on Huh-7 – Size changes

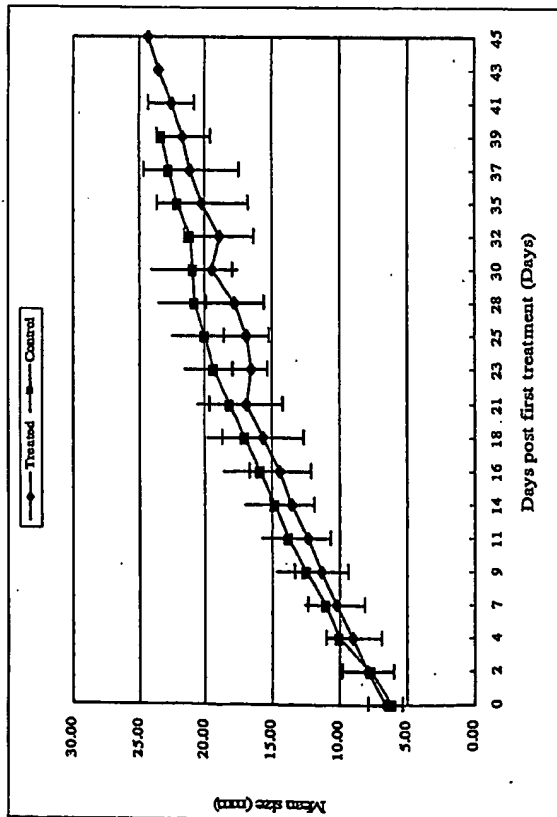


Fig. 26A

Drug effect on Huh-7 – Weight changes

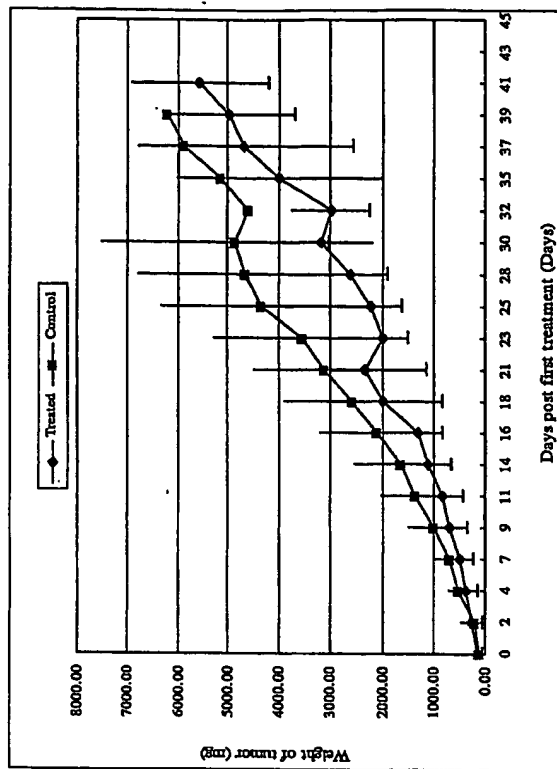


Fig. 26B

10/518223

Drug effect on MCF-7 – Size changes

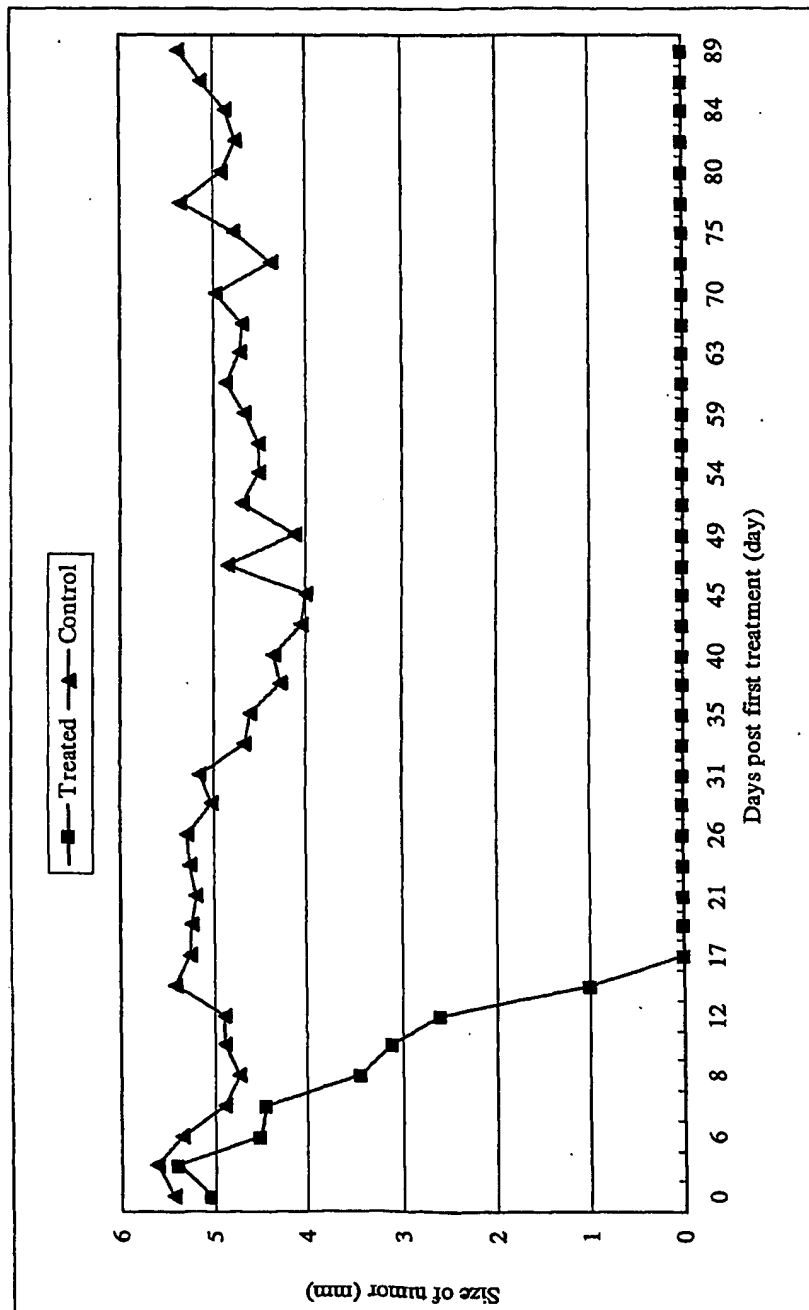


Fig.27

10/518223

45/46

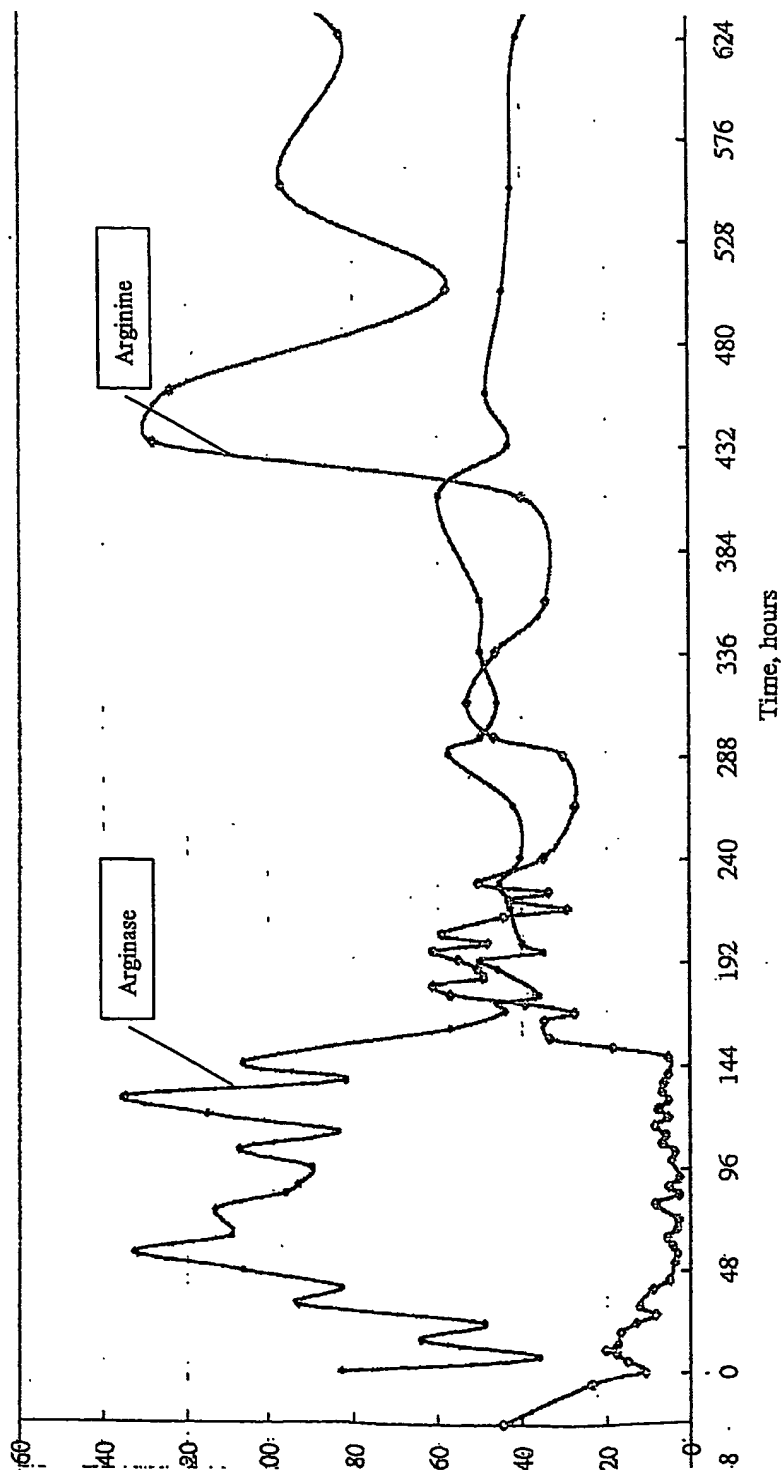


Fig. 28

10/518223

46/46

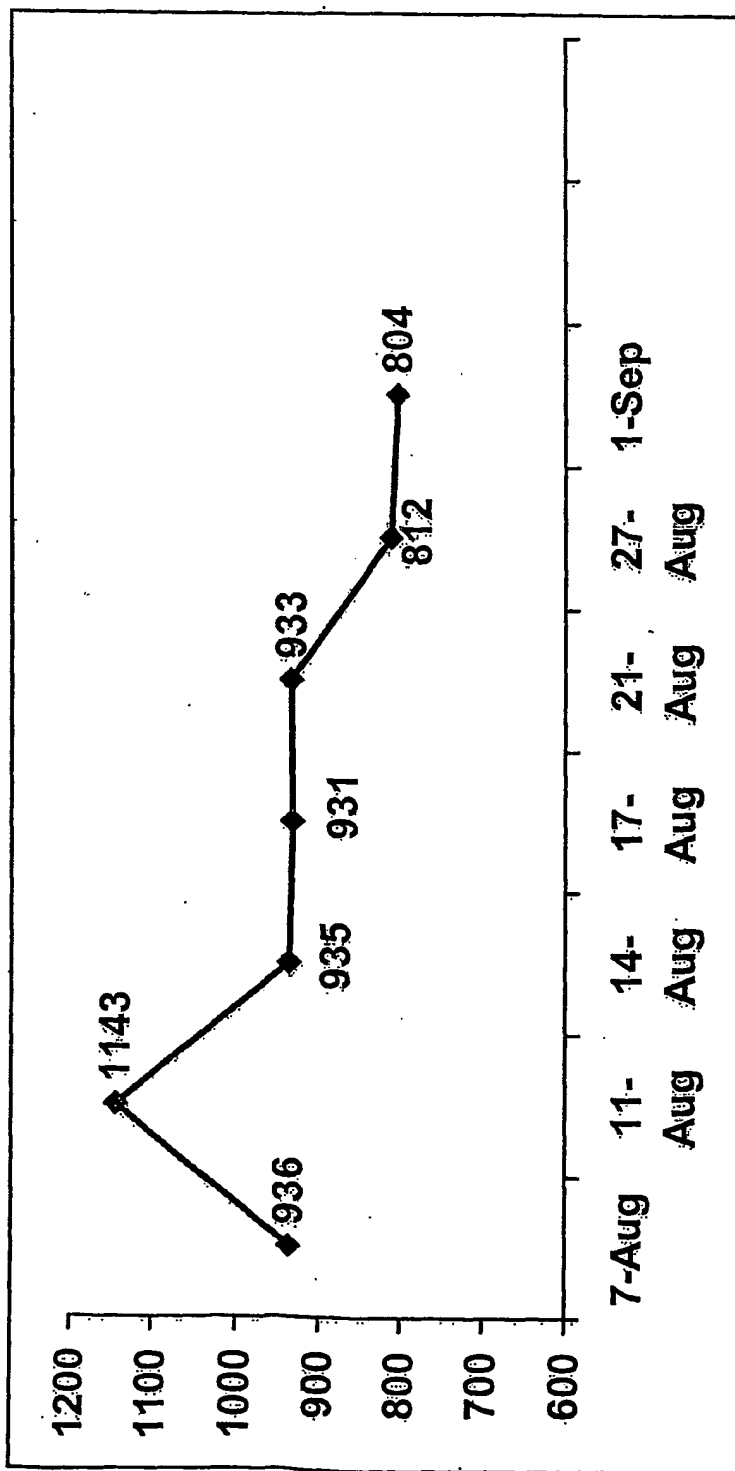


Fig. 29

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